

Contents of *Aquaculture*, Volume 167

VOL. 167 NOS. 1, 2

1 August 1998

Nutrition

- The relationship between food availability and growth in *Mytilus galloprovincialis* in the open sea (southern Mediterranean)
G. Sarà (Palermo, Italy), A. Manganaro, G. Cortese (Messina, Italy), A. Pusceddu (Ancona, Italy) and A. Mazzola (Palermo, Italy) 1
- Alternative competitive strategies and the cost of food acquisition in juvenile Atlantic salmon (*Salmo salar*)
C.E. Adams, F.A. Huntingford (Glasgow, UK), J.F. Turnbull (Stirling, UK) and C. Beattie (Fife, UK) 17
- Effects of photoperiod on development, growth and survival of larvae of the fighting conch *Strombus pugilis* in the laboratory
N. Brito Manzano, D. Aldana Aranda and T. Brulé (Mérida, Mexico) 27
- Effects of dietary protein concentration on growth and muscle composition of juvenile *Zacco barbata*
W.-J. Shyong (Chiayi, Taipei, Taiwan), C.-H. Huang (Chiayi, Taiwan) and H.-C. Chen (Taipei, Taiwan) 35

Husbandry and Management

- Variation in food consumption, growth, and growth efficiency among juvenile hybrid sunfish held individually
N. Wang, R.S. Hayward and D.B. Noltie (Columbia, MO, USA) 43

Physiology and Endocrinology

- Wild and hatchery-reared brown trout, *Salmo trutta*, differ in smolt related characteristics during parr-smolt transformation
K. Sundell, C. Dellefors and B.Th. Björnsson (Göteborg, Sweden) 53
- Off-season spawning of sunshine bass (*Morone chrysops* × *M. saxatilis*) exposed to 6- or 9-month phase-shifted photothermal cycles
A.E. Tate and L.A. Helfrich (Cheattam Hall, VA, USA) 67
- Temperature adaptation changes ion concentrations in spermatozoa and seminal plasma of common carp without affecting sperm motility
M. Emri, T. Márián, L. Trón, L. Balkay and Z. Krasznai (Debrecen, Hungary) 85

Diseases, parasites and predators

- Relationship between White Spot Syndrome Virus infection and clinical manifestation in Indian cultured penaeid shrimp
P.M. Sudha, C.V. Mohan, K.M. Shankar and A. Hegde (Mangalore, India) 95
- Effects of supplementing the feed to Atlantic cod (*Gadus morhua*) fry with lactic acid bacteria and immuno-stimulating peptides during a challenge trial with *Vibrio anguillarum*
A. Gildberg and H. Mikkelsen (Tromsø, Norway) 103

- Treatment of *Microcotyle sebastis* (Monogenea) on the gills of cultured rockfish (*Sebastes schelegeli*) with oral administration of mebendazole and bithionol
K.H. Kim and E.S. Choi (Pusan, South Korea) 115

Genetics and Breeding

- Prospects of selecting for late maturity in tilapia (*Oreochromis niloticus*). III. A selection experiment under laboratory conditions
G. Hörstgen-Schwark and H.-J. Langholz (Göttingen, Germany) 123
- A comparison of clutch and brood size in the Red Claw, *Cherax quadricarinatus* (von Martens) and the Yabby, *C. destructor* Clark (Decapoda: Parastacidae)
C.M. Austin (Victoria, Australia) 135
- Intraspecific variation in clutch and brood size and rate of development in the yabby, *Cherax destructor* (Decapoda: Parastacidae)
C.M. Austin (Victoria, Australia) 147

VOL. 167 NOS. 3, 4

1 September 1998

Review

- Overview of diets used in larviculture of three Caribbean Conchs: Queen Conch *Strombus gigas*, Milk Conch *Strombus costatus* and Fighting Conch *Strombus pugilis*
D. Aldana-Aranda and V. Patiño Suárez (Mérida, Mexico). 163

Nutrition

- Use of freeze-dried microalgae for rearing gilthead seabream, *Sparus aurata*, larvae. I. Growth, histology and water quality
N. Navarro and C. Sarasquete (Cádiz, Spain) 179
- A histological study of the development of the digestive tract of Siberian sturgeon (*Acipenser baeri*) during early ontogeny
E. Gisbert, A. Rodriguez, F. Castelló-Orvay (Barcelona, Spain) and P. Williot (Gazinet, France) . . 195
- Consumption and apparent dry matter digestibility of six intertidal macroalgae by *Turbo sarmaticus* (Mollusca: Vetigastropoda: Turbinidae)
G.G. Foster and A.N. Hodgson (Grahamstown, South Africa) 211
- Effect of salinity, dietary lipid source and level on growth of milkfish (*Chanos chanos*) fry
V.R. Alava (Iloilo, Philippines) 229
- Growth and survival of juvenile pipefish (*Stigmatopora argus*) fed live copepods with high and low HUFA content
M.F. Payne, R.J. Rippingale and R.B. Longmore (Perth, W.A., Australia) 237
- Effects of restricted ration, time-restricted access and reward level on voluntary food intake, growth and growth heterogeneity of rainbow trout (*Oncorhynchus mykiss*) fed on demand with self-feeders
A. Gélinau (Mont-de-Marsan, Saint-Pée-sur-Nivelle, France), G. Corraze and T. Boujard (Saint-Pée-sur-Nivelle, France) 247
- Estimation of apparent digestibility coefficients in rainbow trout (*Oncorhynchus mykiss*) using different markers. 1. Validation of microtracer F-Ni as a marker
N.M.J. Kabir, K.L. Wee and G. Maguire (Launceston, Tas., Australia) 259
- Optimal dietary levels of lecithin and cholesterol for black tiger prawn *Penaeus monodon* larvae and postlarvae
C. Paibulkichakul, S. Piyatiratitivorakul, P. Kittakoop, V. Viyakarn (Bangkok, Thailand), A.W. Fast (Kaneohe, HI, USA) and P. Menasveta (Bangkok, Bangkok, Thailand) 273

Husbandry and Management

- Availability of wild spat of the blacklip pearl oyster, *Pinctada margaritifera*, from 'open' reef systems in Solomon Islands
K.J. Friedman, J.D. Bell and G. Tiroba (Honiara, Solomon Islands) 283

Diseases, parasites and predators

- Effects of a probiotic bacterium on black tiger shrimp *Penaeus monodon* survival and growth
S. Rengpipat (Bangkok, Thailand), W. Phianphak (Pathumtani, Thailand), S. Piyatiratitivorakul and
P. Menasveta (Bangkok, Thailand) 301

Physiology and Endocrinology

- Physiological responses of the Chilean scallop *Argopecten purpuratus* to decreasing salinities
J.M. Navarro and C.M. Gonzalez (Valdivia, Chile) 315
- Salinity tolerance of *Mugil cephalus* and *Chelon labrosus* (Pisces: Mugilidae) fry in experimental
conditions
G.N. Hotos and N. Vlahos (Mesolonghi, Greece) 329

Genetics and Breeding

- Genetic features of salinity tolerance in wild and domestic guppies (*Poecilia reticulata*)
T. Chiyokubo, T. Shikano, M. Nakajima and Y. Fujio (Sendai, Japan) 339

- Announcement** 349

- Contents of Aquaculture, Volume 167** 351